

## **THE INFLUENCE OF TECHNOLOGICAL CHARACTERISTICS ON THE STORAGE OF EVENING MELON HARVEST GROWN IN THE CONDITIONS OF TASHKENT REGION**

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**Annotation.** This article is based on the information on the research conducted on the scientific justification of the reproduction of products made on the basis of the melon fruit processing technology in the conditions of the Tashkent region. At the same time, the influence of technological properties and chemical composition of melon on storage properties was studied.

**Key words:** melon, level of sugar, consistency, chemical composition, fiber, hemicellulose, starch, pectin substances, organic acids.

Uzbekistan is not among the top ten major exporting countries in the world. Taking into account that this year's export volume is at a record level, this amount is only about 2% of the total export volume in the world market. However, in terms of its nature, climatic conditions, and centuries-old traditions of local farmers in melon cultivation and preservation, Uzbekistan has the potential to take a leading position in the world market for melon exports. For example, Spain and Guatemala, which are the largest exporters of melons in the world market, produce about 350 million per year. dollar product - exports 400-450 thousand tons of melons.

The country that consumes the most melons is China. Here, from 13 million to 17 million per year. while buying tons of melons. The second place in melon production is occupied by Turkey (1.7 million tons), the third place by Iran (1.6 million tons), and the fourth place by India (1.2 million tons). At the moment, these countries are the largest melon-growing countries in the world. In particular, almost half of the melons grown in the world are accounted for by China, and each of the other three countries account for 4% to 6%. And very little of the product of these countries is exported, they are not included in the list of the largest exporters of melons in the world. Central Asian countries, Turkey, Iran and Morocco are among the leaders in per capita consumption of melons. Per capita consumption of melons in these countries ranges from 15 to 22 kg per year. At this point, it should be said that the world's per capita consumption of melon is 4.25 kg per person per year on average.

Cultivation and consumption of melons is widespread in Uzbekistan. Its regionalized varieties allow production and sale of this product in many regions of our country to meet the demand of the population. Therefore, commercial varieties and nutritional value of winter melon fruits

grown in different regions, their storage regimes according to their types and varieties have been studied relatively little.

More than 150 varieties of melons have been created in the national selection of our country. They ripen at different times of the year. For example, late-ripening varieties such as "Umrboqi", "Koybosh", "Gulobi" can be stored until maturity. Melon is not only eaten raw, but it is also used to make jam, molasses, and jam.

It consists of selection of varieties of melons that can be preserved from the collection of melon crops, study of their agrobiological and technological properties, and scientific justification of the technology of melon preservation.

**The tasks of the research are as follows:**

- selection of melon varieties to keep from the collection;
- research of technological, organoleptic and biochemical composition of late melon varieties;
- preparation of proposals and recommendations on the technology of storing melons

**Marketability of melon varieties and biochemical parameters of fruits**

External, internal appearance and taste of varieties are of great importance when selling or shipping melon crops abroad. In cooperation with the scientific staff of the laboratory "Selection of Vegetable and Potato Crops" of the Scientific Research Institute of Vegetables, Potatoes and Potatoes, the morphobiological characteristics of potato varieties were studied.

*Table 1.*

**Marketability and transportability of the studied varieties (Tashkent region, 2020)**

№	Varieties name	Thickness	Hardness	To transport convenience
1.	Toyona	thick	Hard	Comfortable
2.	Story of life	Thick	Hard	Comfortable
3.	Gulobi Khorezmi	Thin	average	Inconvenient
4.	Cradle	average	Hard	Inconvenient
5.	Generosity	thick	Hard	Comfortable
6.	Zargulobi	Thick	Hard	Comfortable
7.	Golden Valley	thick	Hard	comfortable

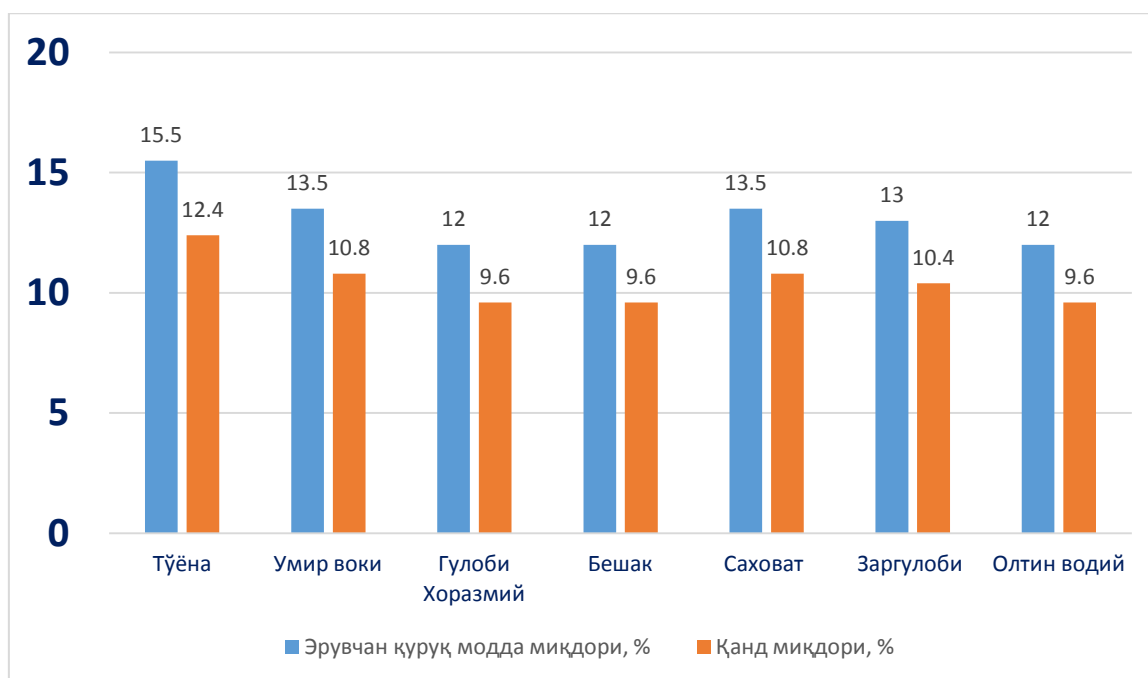
In the experiments, changes in the fruit weight of melon varieties according to the period, blood content, soluble dry matter and long-term storage were studied.

*Table 3.5.*

### Indicators on economic and biochemical characteristics of melon varieties

№	Varietal name	Fruit weight kg.			Soluble dry matter content, %	Amount of sugar, %	The thickness of the meat, sm	storage, moon
		26.08.21 y.	09.10.21 y.	Weight lost in 52 days, gr.				
1.	Toyona	2,870	2,240	630	15,5	12,4	3,5	Not saved
2.	Story of life	5,205	4,180	1025	13,5	10,8	4,0-5,0	Not saved
3.	Gulobi Khorezmi	3,385	3080	305	12	9,6	4,0	It will be saved
4.	Cradle	2,985	2,870	115	12	9,6	4,0	It will be saved
5.	Generosity	3,090	2,435	655	13,5	10,8	4,0	It will be saved
6.	Zargulobi	2,800	2,700	100	13	10,4	4,5	It will be saved
7.	Golden Valley	2,600	2,430	170	12	9,6	4,5	It will be saved

These characteristics are of great importance in the cultivation of melons intended for export.



**Figure 1. Soluble dry matter and sugar content of the tested cultivars**

Among the melon varieties, Toyona variety had 12.5% sugar content, 15.5% soluble dry matter content, and 630 grams of lost weight in 52 days. The fact that the indicators of the Golden Valley, Zargulobi, Beshak and Sakhavat varieties in terms of economic characteristics are higher than other varieties

During the experiments, 5 pieces of melon fruits were taken from the studied varieties and sent to the laboratory in order to study the density, appearance, color, shape and biochemical composition of the fruits. Among the studied varieties, the Aq novot variety with a high weight (4.2 kg.) was isolated. Fruits of the following varieties were included in the minimum weight: Beshak was equal to 1.4 kg, Zargulobi variety was equal to 1.6 kg. According to the thickness of the meat, the following varieties had high indicators: Gulobi Khorazmiy - 4-5.5 cm, Umrivoki 5.0 cm, Zargulobi 4.5 cm.

The weight, shape, sugar content and soluble solids of melon cultivars are of great importance in the commercial properties. Productivity is especially important when exporting abroad. In our experiments, the varieties of polys crops that obtained high indicators were grown in the farm field and stored in special rooms for delivery to farmers' farms.

## CONCLUSIONS

1. According to the results of the laboratory analysis, the sugar content of the Toyona variety of melon was 12.5%, the amount of soluble dry matter was 15.5%, and the weight lost in 52 days was 630 grams. It was found out that the indicators of Altin Vady, Zargulobi, Beshak and Sakhavat varieties are higher than other varieties.
2. The yield of melon varieties varied from 17.1 to 37.3 tons per hectare. The highest (26.9-36.8 t/ha) and high-quality (dry matter content is more than 14.0%, sugar content is more than 12.0%) was obtained from the Golden Valley, Sakhavat, Tuyona, Zargulobi varieties of melons.

3. The thickness of the shell of polys crops is of great importance for transportation and storage. Among the melon varieties, the thickness of the peel was 4-5 cm in the Golden Valley and Zargulobi varieties.

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